

City of Alexandria, Virginia

Robinson Terminal South Material Hauling & Third Party Review

March 17, 2015



Background



- Site originally slated for hotel in waterfront plan
- Council reduced hotels from 3 to 2
- Staff determined that mixed-use development was appropriate for this site
- Staff worked through a site design with the applicant to come to current proposal

Hauling by Truck or Barge



Issue:

- Should the project use barges rather than trucks to import and export materials from the site.

Status:

- Hauling information requested of the applicant has been received for review.
- A third party engineer reviewed barging vs. trucking analysis.

Material Movement and Volumes



Item	Barge	Truck
Demolition export: 770 CY	1/3	77
Earth Fill: 15,000 CY	8	1,500
Earth export: $(40,000 + 15,000) = 55,000$ CY	28	5,500

Truck capacity approximately 10 CY

Barge capacity approximately: 2,000 CY

1 Barge = 200 Trucks

RTS Third Party Review of EYA Analysis



- **AECOM/URS Conclusions:**

- Barging concepts are feasible, although additional challenges exist due to constructability issues
- Few commercially available options for loading/offloading significantly increase transportation costs
- Soil contamination issue limits soil disposal options and further increases costs.
- If barging fill material, consider barging demolition material to Baltimore for scrap/disposal.

Additionally:

- Barging operation likely to take 2-3 months longer due to cycle times associated with long tows
- Barging and trucking cost estimates in alignment with current market
- May be feasible to define some portion of the excavated material as “clean”

Barging Pros



Barging: Pros

- This project site is located on the waterfront, has waterfront access, and can physically accommodate barging of materials.
- Reduces noise and truck traffic.
- Address citizens' concerns that large volume of trucks will cause vibrations and damage to properties and City streets.

Barging Cons



Barging Cons:

- Materials are handled multiple times, resulting in increase in fugitive emissions.
- More expensive option.
- May increase construction duration.

Trucking Pros



Trucking Pros:

- Most common methodology for transporting materials.
- Fewer fugitive emissions concerns.
- Shorter overall project time as compared to barging.
- Less expensive option.

Trucking Cons:



Trucking Cons:

- More noise and truck traffic.
- Increased potential damage to City streets and other properties.

Trucking vs. Barging Options



Option A: Haul by Truck, EYA total cost estimate:
\$3.2M

Option B: Haul by Barge, EYA total cost estimate:
\$4.80M

Option C: Truck and Barge combination

Proposed Additional Conditions



	Option A Trucking	Option B Barging	Option C Barging & Trucking
Pre & Post House Surveys	Yes*	No	Yes*
All Haul Route Mill & Overlay	Yes*	No	No
Union St. Mill & Overlay	Yes*	No	Yes*
Dedicate Person Truck Monitoring	Yes*	Yes**	Yes*

*Additional costs to developer

** Demolition only

EYA Crane Barge

